

REMARKS

Status of the Claims

Claims 1-24 are pending in the present application. Applicants have provided a clean set of claims for the Examiner's convenience. No amendments have been introduced into the claims at this time. Thus, there is no issue of new matter or new issues raised by this Reply.

Election/Restriction

Process claim 24 has been withdrawn from consideration by the Examiner as directed to a non-elected invention. However, the Examiner is reminded of MPEP §821.04 entitled "Rejoinder", which expressly states that "...if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined."

Accordingly, the Examiner is respectfully requested to rejoin process claim 24 upon allowance of the product claims.

Claim Rejections Under 35 USC 102/103

Claims 1-8, 11 and 17-20 are rejected by the Examiner under 35 U.S.C. 102(b)/103(a) over U.S. Patent 4,220,579 to Rinehart, U.S. Patent 4,239,862 to Matthews or U.S. Patent 4,311,628 to Abdou-Sabet et al. Claims 1-8, 11-13 and 17-20 are rejected by the Examiner under 35 U.S.C. 102(b)/103(a) over U.S. Patent 4,728,692 to Sezaki et al. or U.S. Patent 4,818,785 to Ottawa et al. These rejections are respectfully traversed. Reconsideration and withdrawal thereof are requested.

The present invention as recited in claim 1 relates to a fully or partially crosslinked olefinic thermoplastic elastomer composition comprising 10 to 90 parts by weight of a crystalline polyolefin (a), 90 to 10 parts by weight of an olefin-based copolymer rubber (b) (the total amount of the components (a) and (b) being 100 parts by weight) and 3 to 100 parts by weight of a paraffinic mineral oil softening agent (c) having an evaporation loss of 0.4% by weight or less at a condition of 200 °C, atmospheric pressure and 1 hour and having a kinetic viscosity (40 °C) of 50 to 250 cSt.

Contrary to the position taken by the Examiner, the prior art references cited by the Examiner do not disclose or suggest a composition having the claimed properties. The invention uses paraffinic oil having an evaporation loss of 0.4% or less. Thus,

the invention is novel since the prior art uses commercially available paraffinic oils having an evaporation loss of more than 0.4%.

Moreover, Applicants hereby provide additional data with respect to evaporation loss of Sun Par 150 and Super Oil M100 manufactured by ENEOS, which is a commercially available paraffinic oil.

Oil 1 (Tufflo 6056) described in col. 10, lines 29-37 of the Rinehart patent and the paraffinic oil described in col. 6, lines 35-38 of the Matthews patent have properties which are similar to those of Sun Par 150 and a paraffinic oil (c-3) manufactured by Idemitsu Kosan Co. under the Tradename PW-90. See the comparative examples of the present specification.

Applicants could not obtain the product, Tufflo 6056, or further specific information for Tufflo 6056. Further, none of the Matthews et al., Abdou-Sabet et al. or Sezaki et al. references disclose or define a trade name of paraffinic oil. Therefore, it is not possible for any party to provide additional data regarding Tufflo 6056 and the paraffinic oils described in these three references, except for the data that is provided in the references themselves.

Accordingly, the properties of the various relevant paraffinic oils are set forth in the Table below:

		Sun Par 150 ¹⁾	Tufflo 6056	Matthews et al.	PW-90	Super Oil M100	Exp. 1 (c-1)	Exp. 2
Kinetic viscosity	(cst)	93.9 ¹⁾			87.6	97.1 ²⁾	102.3	97.25
Viscosity Index					103	96 ²⁾	103	103
flash point	(°C) (°F)	256 ¹⁾	232 450	232 450	256	268 ²⁾	274	274
pour point	(°C)	-15 ¹⁾			-15	-12.5 ²⁾	-15	-15
Density	(g/cm ³)	0.872 ¹⁾	0.8762	0.8762	0.8691	0.886 ²⁾	0.8709	0.8705
molecular weight		530 ¹⁾	550	550	540			
evaporation loss	(%)	0.7 ³⁾			0.77	0.6 ³⁾	0.22	0.26

- 1) quotation from technical bulletin by Japan Sun Oil Company, Ltd. (Annex 2)
- 2) quotation from catalog by ENEOS (Annex A).
- 3) quotation from information by the oil maker.

The chart above is similar to the chart provided in the prior Reply, except that the column "Super Oil M100" has been added. Also, the values in the column "Sun Par 150" have been further identified with reference to footnotes "1)", "2)" or "3)" of the Table.

The paraffinic oils described in the references have a molecular weight of 530-550 and have properties which are similar to those of Sun Par 150, Super Oil M100 and a paraffinic oil (c-3) of Idemitsu Kosan Co. known by the Tradename PW-90. Thus, the commercially available paraffinic oils, such as Tufflo 6056 have an evaporation loss of more than 0.4%.

In contrast to the cited prior art, the present invention uses a paraffinic oil having an evaporation loss of 0.4% or less, which is obtained by cutting low molecular weight components from a commercially available paraffinic oil, such as PW-90. See Examples 1 and 2 of the present specification.

The present invention is able to provide an olefinic thermoplastic elastomer composition superior in antifogging or low hazing property by the use of a paraffinic oil having an evaporation loss of 0.4% or less. This is nowhere disclosed or suggested in the prior art.

Response to Examiner's Comments in First Paragraph of Paragraph 10 of Office Action

The Examiner argues that Applicants only point to oils in three examples from two out of the five cited prior art references, with no reference to oils in the other three references.

Applicants have explained why all of the cited oils cannot be further evaluated. Applicants cannot obtain the product Tufflo 6056 or any information concerning Tufflo 6056. Further, none of the Matthews et al., Abdou-Sabet et al. or Sezaki et al. references define a trade name or specific information about a paraffinic oil. Therefore, Applicants cannot submit further data regarding Tufflo 6056 and the paraffinic oils described in Matthews et al., Abdou-

Sabet et al. and Sezaki et al. except for the data described in the references.

Accordingly, several of the cited oils relied upon by the Examiner are not available and/or not sufficiently described such that they cannot be obtained, tested and evaluated. Therefore, with respect to such specific species relied upon by the Examiner, such species are non-enabling and cannot be relied upon in the rejection.

In an attempt to address the Examiner's concerns, Applicants have provided data of evaporation loss for Sun Par 150 and for Super Oil M100 manufactured by ENEOS, which is a commercially available paraffinic oil.

Response to Examiner's Comments in Second Paragraph of Paragraph 10 of Office Action

The Examiner objects to the data in the Table since the Table does not list evaluation losses for all of the selected oils. Applicants have addressed this point above. That is, it is impossible for anyone to provide information concerning non-enabling species. Thus, these species cannot be relied upon in the rejection.

The Examiner indicates that it is unclear why Applicant believe that their invention can assert novelty based on their evaporation losses. However, Applicants previously argued that the claimed invention uses paraffinic oil having an evaporation loss of 0.4% or

less. Thus, the invention is novel since the prior art uses commercially available paraffinic oils having an evaporation loss of more than 0.4%.

Finally, the paraffinic oils described in the references have a molecular weight of 530-550 and have properties which are similar to those of Sun Par 150, Super Oil M100 and a paraffinic oil (c-3) (made by Idemitsu Kosan Co., tradename PW-90). Therefore, it is submitted that commercially available paraffinic oils, such as Tufflo 6056 have an evaporation loss of more than 0.4%.

Response to Examiner's Comments in First Paragraph of Paragraph 11 of Office Action

The Examiner asserts that Applicants base patentability on the argument that "the oils are obtained by cutting low molecular weight components from a commercially available paraffinic oil" and that this limitation should be in the claim. However, Applicants disagree with the Examiner for the following reasons.

(i) The Examiner misquotes Applicants' arguments of record. On page 11 of the prior Reply, Applicants argued that "the present invention uses a paraffinic oil having an evaporation loss of 0.4% or less which is obtained by cutting low molecular weight components from a commercially available paraffinic oil" and "the claimed invention provides an olefinic thermoplastic elastomer composition having superior antifogging properties (e.g. low hazing

property) by using a paraffinic oil having an evaporation loss of 0.4% or less." This "evaporation loss" limitation is expressly recited in claim 1.

(ii) Applicants previously argued that the invention uses paraffinic oil having an evaporation loss of 0.4% or less. Thus, the invention is novel since the prior art uses commercially available paraffinic oils having an evaporation loss of more than 0.4%.

(iii) Even if Applicants were to accept the Examiner's proposal (i.e. the oils are obtained by cutting low molecular weight components from a commercially available paraffinic oil), Applicants are concerned about a limitation that recites "commercially available". In any event, the paraffinic oil is already recited in the existing claim, as is the requirement that the paraffinic oil has an evaporation loss of 0.4% or less.

(iv) The Examiner's proposal appears to be a process limitation rather than a limitation of the component of the claimed composition. More importantly, Applicants already defined the relevant limitation (e.g. evaporation loss of 0.4% by weight or less) in the claim.

(v) Applicants need only define the components of the composition, not where the materials are obtained. Thus, Applicants are not utilizing limitations from the specification that are not

recited in the claims, contrary to the position taken by the Examiner.

Response to Examiner's Comments in Second Paragraph of Paragraph 11 of Office Action

The Examiner comments that page 25, paragraph 1 of the specification teaches a limitation of kinetic viscosities from 200 to 1000 cSt whereas the claims require paraffinic oils with kinetic viscosities from 50 to 250 cSt. However, "Softening agent (C)" described on pages 24-25 of the specification is a component in the composition of a different aspect of the present application. (See claim 17)

On the other hand, "paraffinic mineral oil softening agent (c)" is a component in the composition of claim 1. Thus, the Examiner's comments in the second paragraph of paragraph 11 of the Office Action are not relevant to the relevant limitation in claim 1.

Response to Examiner's Comments in Second Paragraph of Paragraph 9 of Office Action

The Examiner argues that the present invention is obvious because the claimed invention "appears within the generic disclosure of the prior art". However, such an assertion cannot establish a prima facie case of obviousness. See *In re Baird*, 16

F.3d 380, 29 U.S.P.Q.2d 1550 (Fed. Cir. 1994) and *In re Jones*, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

In summary, the claimed invention provides an olefinic thermoplastic elastomer composition having superior antifogging properties (e.g. low hazing property) by using a paraffinic oil having an evaporation loss of 0.4% or less. Therefore, in view of the remarks hereinabove, reconsideration and withdrawal of the prior art rejections are respectfully requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Marc S. Weiner (Reg. No. 32,181) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of \$950.00 is being paid with the Notice of Appeal being filed concurrently herewith.

Appl. No. 09/779,558

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 

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MSW/sh
1254-0170P

Attachment(s)

BAS-0003-0302

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● 種 類

10、12、22、32、46、68、100、150、460の9グレードがあります（数字は原則として40℃における動粘度に最も近いISO粘度グレードを表しています）。

● 荷 姿

ローリー、200/ドラム、18/缶（M10のみ）

スーパーオイルMシリーズの代表性状および新旧銘柄対照表

種 類	10	12	22	32	46
密度(15℃) g/cm ³	0.864	0.859	0.865	0.871	0.880
引火点 ℃	178	206	222	234	256
動粘度(40℃) mm ² /s	10.5	14.1	20.2	28.3	47.7
動粘度(100℃) mm ² /s	2.71	3.27	4.08	5.00	6.84
粘度指数	91	98	101	102	97
流動点 ℃	-12.5	-17.5	-15	-15	-12.5
色 ASTM	L1.0	L0.5	L0.5	L0.5	L0.5
アニリン点 ℃	84	92	95	98	101
DMSO抽出物量 %	3未満	3未満	3未満	3未満	3未満
消防法危険物分類	第3石油類	第3石油類	第3石油類	第4石油類	第4石油類
旧銘柄(日本石油)	—	—	スーパーオイルAL (第4石油類)	スーパーオイルA	スーパーオイルBL マシン油46P
旧銘柄(三菱石油)	ダイヤモンドHS60	ダイヤモンドSN80	ダイヤモンドSN100	ダイヤモンドSN150	ダイヤモンドSN250

種 類	68	100	150	460
密度(15℃) g/cm ³	0.883	0.886	0.889	0.901
引火点 ℃	256	268	272	316
動粘度(40℃) mm ² /s	71.0	97.1	136	467
動粘度(100℃) mm ² /s	8.87	10.9	13.7	31.0
粘度指数	97	96	96	96
流動点 ℃	-12.5	-12.5	-12.5	-12.5
色 ASTM	L0.5	L1.0	L1.5	L2.5
アニリン点 ℃	106	108	112	121
DMSO抽出物量 %	3未満	3未満	3未満	3未満
消防法危険物分類	第4石油類	第4石油類	第4石油類	可燃性液体類
旧銘柄(日本石油)	マシン油68P	スーパーオイルC 30スーパーオイルP	スーパーオイルD 40スーパーオイルP	スーパーオイルF
旧銘柄(三菱石油)	ダイヤモンドSN350	ダイヤモンドSN500	ダイヤモンドSN700	ダイヤモンドSN150BS

※代表性状値は、商品の改定により、予告せずに変わる場合があります。(2003年2月)

